Southern Forest Pest Reporter

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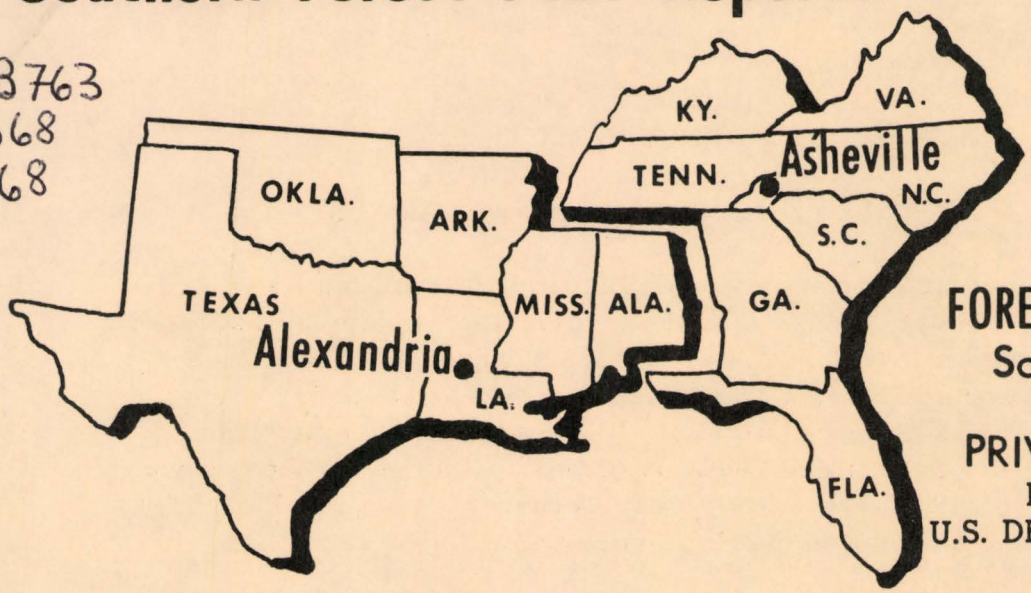

DIVISION OF
FOREST PEST CONTROL
Southeastern Area
STATE AND
PRIVATE FORESTRY
FOREST SERVICE
U.S. DEPT OF AGRICULTURE

FIELD OFFICES
Asheville, N.C.-Alexandria, La.

Number 3 1720 Peachtree Rd., N. W., Atlanta, Georgia 30309 October 1969

SUMMARY OF CONDITIONS

... Surveys conducted during September revealed that southern pine beetle infestations were continuing at epidemic levels on the Bankhead National Forest in Alabama. Infestations in North Carolina increased in the Piedmont and mountainous regions and increased in the Piedmont and sand hills region of South Carolina. Southern pine beetle infestations are increasing on the Tellico Ranger District of the Cherokee National Forest.

... Southern pine beetle activity has declined considerably on both private and National Forest lands in east Texas when compared to 1968 levels.

... Ips engraver beetles are active in several states in the Southeastern Area. Ips beetles were active and invading trees windthrown by Hurricane Camille three and one-half weeks after the hurricane struck.

... The walkingstick has defoliated approximately 100,000 acres of National Forest land in eastern Oklahoma and western Arkansas.

... Cooperative oak wilt detection surveys in nineteen counties in Kentucky and two counties in eastern Tennessee show a continued low incidence of the disease.

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STATUS OF FOREST INSECTS

SOUTHERN PINE BEETLE, Dendroctonus frontalis, Zimm.

ALABAMA

Infestations are continuing at epidemic levels on the Bankhead National Forest. Surveys conducted during September revealed an infestation level of 63.9 trees per M acres host type on the Black Warrior District and 16.4 trees per M acres host type on the Bankhead District. Activity has declined to an endemic level on the Oakmulgee Division of the Talladega National Forest. Reports of increased activity were received from the Talladega Division of the Talladega National Forest.

One tree killed by southern pine beetle was detected on the Horseshoe Bend National Military Park.

LOUISIANA

Outbreaks on private lands declined to endemic levels during the summer months. No activity was detected in Allen Parish where infestations have persisted since 1963 and populations declined to .17 trees per M acres host type in central Louisiana. Some localized activity is continuing however. A spot of 219 trees was detected in Vernon Parish and salvaged (Louisiana Forestry Commission.)

Recently completed detection surveys of the Kisatchie National Forest revealed a secondary southern pine beetle infestation associated with Ips engraver beetles on the Catahoula and Winn Districts.

MISSISSIPPI

Infestations are continuing at low levels on the Homochitto National Forest in southwestern Mississippi and adjoining private lands in Amite and Wilkinson Counties.

Southern pine beetle infestations were detected on the Natchez Trace Parkway between Port Gibson and Rocky Springs.

NORTH CAROLINA

Southern pine beetle damage increased in the Piedmont and mountainous regions of the state in the last quarter. A September survey by the Division of Forest Pest Control on the Tusquitee Ranger District, Nantahala National Forest indicates 7.4 infested trees per M acres with brood densities in the neighborhood of 553 insects per square foot. In the Piedmont, a 15 county survey located 1,806 spots averaging 10-20 trees each with numerous spots exceeding 100 trees. Data from ground checks in the area point to a rapidly expanding southern pine beetle population.

NORTH CAROLINA (Cont'd)

Many of the spots are five to twenty acres in size. Salvage has been intensified in an effort to prevent the outbreak from getting larger.

SOUTH CAROLINA

Damage caused by the southern pine beetle has decreased to very low levels on the Francis Marion, Long Cane-Edgefield and Andrew Pickens Districts of the Francis Marion and Sumter National Forests. Moderate populations of the beetle were found on the Tyger and Enoree Districts where an August survey estimated that there was 3.8 ± 6.8 infested trees per M acres on these Districts.

Preliminary results from an aerial photographic survey made by the U. S. Forest Service, Division of Forest Pest Control in cooperation with the South Carolina Division of Forestry indicate the presence of 38 ± 20 bark beetle infested trees per M acres in the 24 county Piedmont and sand hills region of the state. Brood densities, however, were reported to be low.

TENNESSEE

The southern pine beetle is epidemic on the Tellico Ranger District, Cherokee National Forest in Tennessee. A September aerial photographic survey estimated the infestation level at 747 ± 398 infested trees per M acres. Indicative of the rate of increase of the beetle in this area was a spot containing a single red-topped tree surrounded by 75 green infested trees. Brood density averaged 522 beetles per square foot.

Bark beetle activity has increased on the Atomic Energy Commission Reservation at Oak Ridge, Tennessee. The southern pine beetle infestation was estimated at 22.9 ± 2.7 trees per M acres by a September aerial photographic survey conducted by the Division of Forest Pest Control.

The southern pine beetle population in the Cades Cove area of the Great Smoky Mountains National Park in Tennessee is continuing at approximately the same level found earlier this spring. A recent aerial photographic survey estimated the number of infested trees at 94 ± 87 trees per M acres of host type. A noticeable increase in the parasite population was evident from ground check data, but brood densities were still a relatively high 175 beetles per square foot.

SOUTHERN PINE BEETLE (Cont'd)

TEXAS — Activity has declined considerably on private lands in east Texas. During the period January 1 to September 4, 1969, a total of 1698 spots had been detected. This is 3760 less than detected as of September 4, 1968. Control operations are continuing (Texas Forest Service).

Populations have also declined on the National Forests in Texas in comparison to 1968 levels. Infestation levels on the Angelina National Forest during June, 1969 were 57 trees per M acres host type. On the Sabine National Forest, population levels were 2.2 and 8.2 trees per M acres host type on the Yellowpine and Tenaha Districts respectively. Infestations were detected for the first time on the Raven District, the westernmost district of the Sam Houston National Forest.

VIRGINIA — Southern pine beetle activity increased in Campbell, Halifax, Buckingham and Prince Edward Counties during the late summer months. Elsewhere, in the state the beetle is at endemic levels. (Virginia Division of Forestry.)

BLACK TURPENTINE BEETLE, Dendroctonus terebrans (Oliv.)

ARKANSAS — Attacks are occurring in trees suffering from mechanical injury due to camping units in campgrounds on the Sylamore District of the Ozark National Forest.

MISSISSIPPI — Over a dozen loblolly pines along the west shore of Ross Barnett Reservoir along the Natchez Trace Parkway were attacked and killed by the black turpentine beetle after being weakened by inundation.

NORTH CAROLINA — Serious losses due to a large black turpentine beetle population were reported from an 800 acre tract in Cumberland County and a 90 acre tract in Sampson County. (North Carolina Division of Forestry.)

IPS ENGRAVER BEETLES, Ips spp.

ARKANSAS — Ips avulsus (Eich.) is causing mortality of young pines on the Ozark National Forest. Groups of up to 100 infested trees were detected.

FLORIDA

The 13th annual survey of tree mortality in Florida, which covered only the northern portion of the state this year, was conducted jointly by the Florida Division of Forestry and the U. S. Forest Service, Division of Forest Pest Control. Results of the survey indicate the pine mortality was down 40% from last year to 1,251,360 trees. This represents approximately 8.6 trees per M acres of pine type. Ips spp. were responsible for most of the damage. A notable decrease in black turpentine beetle, Dendroctonus terebrans Oliv. damage was reported.

GEORGIA

Ips avulsus and I. grandicollis are reported to have killed several small spots on the Kennesaw Mountain National Battlefield Park. Twenty-five Ips spp. spots in young pine plantations ranging in size from 50 to 100 trees have been found in Walton and Newton Counties west of Social Circle.

MISSISSIPPI

I. grandicollis (Eich.) and I. calligraphus (Germar) are invading trees windthrown by Hurricane Camille in southeastern Mississippi. I. grandicollis brood was in the pupal stage and I. calligraphus had completed one generation 3 1/2 weeks after the hurricane struck.

All three species of Ips were attacking and killing trees along the Natchez Trace Parkway adjacent to a pulpwood yard near Kosciusko.

NORTH CAROLINA

Characteristic of this time of year, Ips spp. are reported causing losses in the Anson County area in the Piedmont, and also from Alexander, Cabarrus, Pender, Stanley, Guilford and Yadkin Counties. (North Carolina Division of Forestry.)

OKLAHOMA

I. avulsus killed groups of 30-40 trees surrounding lightning strikes on the Tiak District of the Ouachita National Forest.

SOUTH CAROLINA

To date there has been no serious build-up in the Ips spp. populations in the slash material left after last spring's ice storm. This fact was revealed as the last observations were made on 60 permanent plots established shortly after the storm to follow the possible development of bark beetle populations in the storm damaged timber.

IPS ENGRAVER BEETLES (Cont'd)

VIRGINIA — Ips spp. and the black turpentine beetle are causing scattered spots throughout the state, particularly in Westmoreland, Nansemond, Greensville, Brunswick, King William and Accomac, Fairfax and Halifax Counties. (Virginia Division of Forestry.)

PINE TIP MOTH, Rhyacionia spp.

ARKANSAS — Heavy tip moth damage was observed on young open grown shortleaf pines on the Ozark National Forest.

TEXAS — An increase in pine tip moth activity was reported in Fayette County on loblolly pine. Heavy damage is anticipated in Red River County where pines suffered severe damage in 1968 (Texas Forest Service.)

BAGWORM, Thyridopteryx ephemeraeformis (Haw.)

ARKANSAS — Bagworms, Thyridopteryx ephemeraeformis (Haw.) defoliated eastern red cedar and sassafras on the Pea Ridge National Military Park.

NORTH CAROLINA — Homeowners have reported moderate defoliation of shade trees by the bagworm in Davidson, Burke, Cabarrus and Stanley Counties. (North Carolina Division of Forestry.)

VIRGINIA — An increase in the bagworm, Thyridopteryx ephemeraeformis (Haw.), population is apparent in Caroline County and southeastern Virginia where heavy defoliation was reported on shade trees. (Virginia Division of Forestry.)

TEXAS LEAF CUTTING ANT, Atta texana Buckley

TEXAS — Heavy damage to young pines was reported in San Augustine, Shelby and Wood Counties during the early spring months, but decreased to lower levels as an abundant food source became available later in the summer (Texas Forest Service.)

FALL WEBWORM, Hyphantrea cunea (Drury)

OKLAHOMA — The fall webworm caused damage to pecan, walnut, persimmon, and other hardwoods in and near the Platt National Park.

RED HEADED PINE SAWFLY, Neodiprion lecontei (Fitch)

VIRGINIA — Defoliation by the red headed pine sawfly, Neodiprion lecontei was evident in a three-year-old pine plantation in Sussex County and on scattered groups of loblolly pine in Accomac and Westmoreland Counties. (Virginia Division of Forestry.)

WALKINGSTICK, Diapheromera femorata (Say.)

ARKANSAS and OKLAHOMA — Approximately one hundred thousand acres of red oaks and black locust were severely defoliated by walkingstick on Winding Stair and adjacent mountains on the Ouachita National Forest in eastern Oklahoma and western Arkansas.

MISCELLANEOUS INSECTS

GEORGIA — In Atlanta, the hickory bark beetle (Scolytus quadrispinosus) is causing considerable damage to shade trees.

MISSISSIPPI — Black cherry at the Natchez Trace Parkway headquarters in Tupelo was infested by the apple leaf crumpler Mineola indigenella Zeller.

HARDWOOD DEFOLIATION, (Cause unknown)

TEXAS — Approximately 100,000 acres of live and post oak in Colorado and Lavaca Counties were defoliated by an unidentified lepidopterous larvae in early May (Texas Forest Service.)

VIRGINIA — The fall cankerworm, Alsophila pometaria (Harr.) is epidemic on Bull Run Mountain in Prince William County, Virginia. Heavy defoliation last year was apparently responsible for killing large numbers of black oak in the area. Control may be necessary if the results of a winter egg mass survey indicate potential for continuing heavy defoliation in 1970.

STATUS OF FOREST DISEASES

ANNOSUS ROOT ROT, Fomes annosus (Fr.) Cke.

ARKANSAS — Fomes annosus (Fr.) Cke. is causing extensive mortality of eastern red cedar on the Ozark National Forest. Annosus root rot was the probable cause of leaning pines in an open stand behind the Bayou Ranger Station on the Ozark National Forest.

ANNOSUS ROOT ROT (Cont'd)

MISSISSIPPI — Mortality of eastern red cedar and loblolly pine due to annosus root rot was detected along the Natchez Trace Parkway between Tupelo and Kosciusko.

RED HEART OF PINE, Fomes pini (Thore) Lloyd

ARKANSAS — Infection and heartrot of overmature shortleaf pines by Fomes pini is causing windthrow at Hot Springs National Park.

DUTCH ELM DISEASE, Ceratocystis ulmi (Buism) C. Moreau

ALABAMA — Dutch elm disease was detected for the first time in Colbert and Lauderdale Counties.

ARKANSAS — Extensive mortality of elms due to Dutch elm disease is occurring on the Pea Ridge National Military Park.

OKLAHOMA — An intensive survey for Dutch elm disease failed to reveal additional infection on the Platt National Park. The disease was first discovered here in 1968. The smaller European elm bark beetle Scolytus multistriatus is abundant in the area.

NORTH CAROLINA — Laboratory cultures confirmed the presence of Dutch elm disease for the first time in Charlotte, North Carolina.

OAK WILT, Ceratocystis fagacearum (Bretz) Hunt

KENTUCKY — An oak wilt detection survey covering 19 counties was conducted by the U. S. Forest Service, Division of Forest Pest Control in cooperation with the Kentucky Division of Forestry. Although 14 of the 19 counties were known to have previous oak wilt infections and the remaining five were fringe-area counties, only one suspected tree found this year actually had the disease.

NORTH CAROLINA — Thirteen new oak wilt infection centers containing 17 trees were detected by the North Carolina Forest Service's annual oak wilt survey. The disease was discovered for the first time in Burke County, which marks its easternmost point of infection in the state. Including 15 previously known infection centers with 22 trees, the survey found a total of 28 active infection centers containing 39 trees.

OAK WILT (Cont'd)

TENNESSEE — The results of an oak wilt survey conducted in Greene and Washington Counties, Tennessee in July, 1969 revealed a continued low incidence of the disease. Six positive cultured trees were detected from a 20-percent aerial and ground survey coverage. The survey covered 551,680 acres.

CHESTNUT BLIGHT, Endothia parasitica (Murr.) A. &. A.

ARKANSAS — Chestnut blight is causing extensive mortality of chinquapin on the Pea Ridge National Military Park.

MISCELLANEOUS DISEASES

ALABAMA — A leaf spot Phyllosticta minima (Berk. & Curt.) was observed infecting ornamental maples at Horseshoe Bend National Military Park.

MISSISSIPPI & OKLAHOMA — Eastern red cedar on the Natchez Trace Parkway and Ashe Juniper on the Platt National Park were infected with a needle blight fungus Cercospora spp. which causes flagging of infected trees.

OKLAHOMA — A dieback of ash was detected on the Platt National Park. This is believed to be caused by a combination of hail damage and physiological factors.

Fig. 1 Windthrow following Hurricane Camille created a large volume of host material favorable for Ips attack.

Fig. 2 Galleries of Ips calligraphus in windthrown timber 3 1/2 weeks after Hurricane Camille struck.

More detailed information can be obtained by writing to The Forest Pest Control Division Field Offices listed below or to the Atlanta Office:

FIELD OFFICES	FOR STATES OF:
Asheville Office Amel E. Landgraf Zone Supervisor U. S. Forest Service Div. of Forest Pest Control Post Office Box 5895 Asheville, North Carolina 28803 Phone: (704) 254-0961 Ext. 625	Florida Georgia Kentucky North Carolina South Carolina Tennessee Virginia
Alexandria Office William M. Ciesla Zone Supervisor U. S. Forest Service Div. of Forest Pest Control 2500 Shreveport Highway Pineville, Louisiana 71360 Phone: (318) 445-6511 Ext. 311	Alabama Arkansas Louisiana Mississippi Oklahoma Texas

AREA OFFICE

Russell K. Smith
Assistant Area Director
U. S. Forest Service
Division of Forest Pest Control
1720 Peachtree Road, N. W.
Atlanta, Georgia 30309

Phone: (404) 526-5189